

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



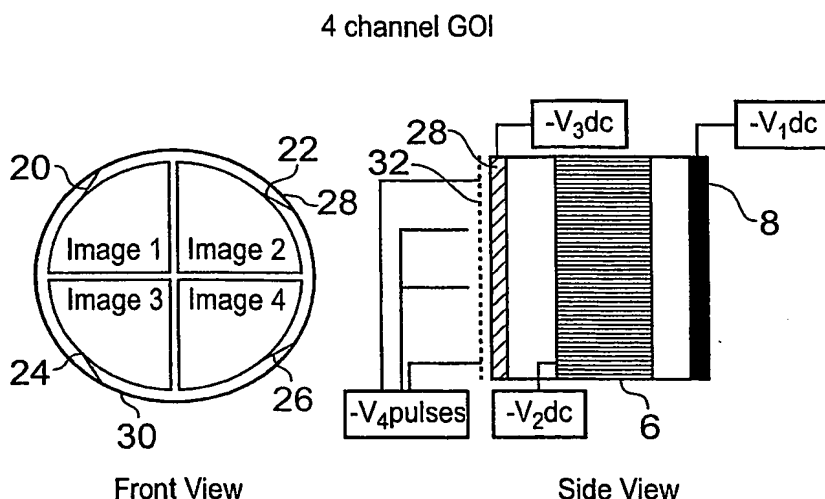
(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/055268 A2

- (51) International Patent Classification⁷: **H01J 31/00**
- (21) International Application Number:
PCT/GB2004/004044
- (22) International Filing Date:
23 September 2004 (23.09.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0327724.1 28 November 2003 (28.11.2003) GB
- (71) Applicants (for all designated States except US): **IMPERIAL COLLEGE INNOVATIONS LIMITED** [GB/GB]; Sherfield Building, Imperial College, London SW7 2AZ (GB). **KENTECH INSTRUMENTS LTD** [GB/GB]; Unit 9 Hall Farm Workshops, South Moreton, Oxfordshire OX11 9AG (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **HARES, Jonathan, David** [GB/GB]; Iden House, Bakers Lane, Brightwell-Cum-Sotwell, Oxfordshire OX10 0PY (GB). **FRENCH, Paul, Michael, William** [GB/GB]; 14 Enbrook Street, London W10 4SF (GB).
- (74) Agents: **ROBINSON, Nigel, Alexander, Julian et al.**; D Young & Co, 120 Holborn, London EC1N 2DY (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: GATED IMAGE INTENSIFIER



(57) Abstract: A gated optical image intensifier (10) is provided with multiple intensifying channels (20, 22, 24, 26) each supplied with radiation via a respective optical channel of an optical splitter. The separate intensifying channels are subject to gating by a sequence of time spaced gating signals generated by an electronic gating signal generator. The multi-channel gated optical image intensifier has particular utility in the field of fluorescence lifetime imaging.

WO 2005/055268 A2